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REVIEW AND RECOMMENDATIONS

THE SIGNIFICANT INDICATOR
WORKLOAD ANALYSIS SYSTEM

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REVIEW AND RECOMMENDATIONS
The Significant Indicator Workload Analysis System

The system was tested on 2 programs, recreation and oil and gas. It was applied to the recreation program statewide, while the oil and gas program was evaluated in the Moab District only. The statewide application (recreation) includes much more detail and many more types of analysis than would normally be expected. This was done in order to illustrate the process used and demonstrate the various types of possible analysis. The district analysis (oil and gas) tests application to a second program. It does not detail discussions of rejected indicators nor does it delve into program complexity.

Recent business management literature has developed three concepts which are useful to government managers. They are 1) focus the organization on doing the right things well, rather than doing things right, 2) focus management tracking on a limited number of key variables addressing priorities and the broad picture, and 3) keep objectivity and realism in decision processes. This workload analysis system can help in these 3 areas.

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A. Short Description of the Significant Indicator System

The system utilizes 3 to 8 key indicators developed for each program. The indicators identified provide a broad, quick overview of relative program workloads in the different offices in the state.

The number of indicators used to evaluate a program needs to be adequate to capture major workloads. A break between the significant indicators and others proposed is generally clear once the work group has eliminated some indicators and ranked those remaining.

Any one job or task is often measured by more than one indicator. For example, the number of allotments might indicate those tasks which are common to all grazing allotments, while the number of operators and the number of AUMs might give an indication of the complexity of the supervision job.

Sample workload models for recreation and oil and gas are attached to this report. Direct data can be used for comparisons among offices within a workload type (permits with permits). Point assignments must be made to "sum" dissimilar workload types such as physical improvement values and permits.

Analysis must focus on work being done, not on what should be done. To be objective, it must emphasize actions taken by the public which directly cause workload rather than ideas generated through BLM processes or value judgements.

The system will give managers a "ballpark" idea of relative workloads and a reading on the pulse of the program. Once developed, the workload model for a program can be updated yearly simply by inputing new data (the 3 to 8 numbers per office). Thus, a consistent, historical data base for those programs analyzed will also be built.

The system is most adept at handling ongoing operational workloads, rather than short term or support workloads. Short term workloads would include items like the various types of activity plans. Support work, such as quality control review and providing guidance, can generally be related to an operational task. These types of work are probably best handled on a case-by-case basis at Annual Work Plan time. In some programs, additional flexibility may also be needed for unforeseen workloads which often occur.

In some situations, the workload model may also be helpful in evaluating "what if" scenarios. For example, the overall increase in workload generated by a 30 percent increase in oil and gas Applications for Permit to Drill (APDs) could be approximated by developing a set of 3 to 8 numbers for the scenario and running those through the workload model.

A. The Goal for the Significant Indicator System

The goal for the system should be modified, from the one proposed in the Briefing Package, to read as follows:

> To provide management with an objective approximation of program size and/or complexity for use in allocating budget and positions.

The Briefing Package goal was to measure program size for all offices and programs within 3 years. The Briefing Package goal statement implies an implementation decision which has not been made and is beyond the scope of the final project contract.

B. Discussion of the System and Its Objectives

1. Objectivity. The system, as applied, is objective. It simply counts, groups, organizes and manipulates raw data using a prescribed method. Analysis which is drawn, is taken directly from the data.

2. Simplicity. The system can be adapted to be as simple or complex as needed. Application should be designed to 1) match the complexity/size of the program being evaluated and 2) serve objectives set by management. Simplicity is most affected by the degree to which the data is manipulated to achieve the analysis target identified by management. In its most basic application, the significant indicator system would require 1) collection of the 3 to 8 numbers per office, 2) assignment and addition of significant indicator points and 3) calculation of percentages from the numbers. The most difficult part of the job is identifying the indicators and establishing support.

3. Flexibility. Changes in management emphasis can be incorporated by 1) changing the weighting assigned to an indicator or 2) introducing or eliminating an indicator. In doing this, the manager will arrive at a different portrayal of workload distribution which reflects the areas of added emphasis. This allows the manager to make adjustments to any significant change in priorities generated by budget or management emphasis.

4. Consistency. The system focuses on the 3 to 8 variables per program. At the same time it identifies the 3 to 8 numbers to be carefully calculated and tracked. As in the recreation analysis, these workload indicator categories can be defined in order that data is consistently collected and submitted. Some quality control will need to be exercised on a statewide basis.

5. Tracking Program Changes. Because the analysis focuses on a limited number of critical variables, it allows changes to be readily identified. It is also advantageous if workload indicators are a reflection of something submitted or generated by the public (external orientation). This identifies a change on the ground rather than a different approach by BLM personnel. Regardless of what the change is, it may also identify a need for staff followup.

6. Cost Efficiency. After development, the workload analysis is easy to maintain. It is a matter of processing new data through a simple model. Using a handful of numbers for each resource area, this can be done for the entire state in a couple of hours (assuming the numbers are available). In most instances, the significant indicator numbers are already maintained somewhere on a program form, although the quality of the numbers may need to be improved.

The system quickly and inexpensively provides an objective starting point for budget or position management discussions. Using the system may also increase budget efficiency by improving the tools available.

7. Resistence to Attempts to Inflate or Deflate. The workload indicators themselves greatly influence their resistence to becoming involved in a numbers game. Those measures generated directly by the public are best, such as the number of applications. Second best are those numbers which can be independently verified, such as facility value. Careful quality control must be exercised over numbers generated solely by specialists, such as visitation statistics.

8. Easy to Understand. Analysis can be reduced to percentages of workload in the 3 to 8 critical workload areas, with graphs and interpretation provided. Supporting data should always be available so the manager can check the specific number of permit authorizations, facilities, etc.

D. Options for Developing the Workload Analysis

Six options for developing the workload analysis model are presented in this section. Advantages and disadvantages are presented for each option. Working groups to develop the workload model would generally consist of 5 to 8 people. All of the approaches would also require that one or more people be assigned to compile data and prepare a report after the workload model is developed.

Judgements concerning which option best fits a program are often likely to be based on: 1) how much broad based support needs to be generated, 2) the size of the program, 3) whether personalities or program regulation would help avoid disagreement over workload measures and, 4) how much detail management wants from the analysis project.

The resources needed for each option will vary according to how many meetings are held, where they are held and, how many people are placed in travel status to attend those meetings. If one program is analyzed, using meetings held at each district and a statewide meeting, the anticipated needs would be:

1. 6 long 1 day meetings (estimated at 1.5 WM),
2. Travel dollars for people assigned to conduct the meetings (est. $300),
3. Travel dollars for district personnel who need to stay overnight to attend meetings (est. $500),
4. Meeting space,
5. Work months and ADP capability to prepare the analysis (est. 0.5 WM).

The commitment of resources could be reduced by selecting any option other than the Field Program Specialist approach outlined below.

1. Field Program Specialist. Multiple work groups are composed of program specialists drawn from both district and resource area offices. Final resolution of differences among district proposals is obtained at a statewide meeting with district specialists. This is the approach used to generate the recreation program workload analysis model.

Advantages

a. Because involvement includes input from both office levels, support is most likely to be established at those levels.

b. Large amounts of program specific expertise will be incorporated.

c. Operational workloads will be emphasized. People who do the work will be providing information about the work.

d. Bias (perceived or real) in favor of historical approaches used by state office program leaders is most likely to be avoided.

e. A program evaluation can be conducted concurrently.

f. It is the most thorough approach. It is likely to generate new ideas and it is unlikely anything will be overlooked after 6 meetings.

Disadvantages

a. It is the most costly and involved way to generate the workload analysis model.

b. It is the most likely to generate resistence in the state office due to concern over roles.

2. Statewide Program Specialist. This approach would use a single work group made up of program specialists from district and resource area offices around the state.

Advantages

a. This approach is less expensive and more direct than the field program specialist approach.

b. It involves some resource area and district offices and thus will generate some support at these levels.

c. Program specific expertise will be incorporated.

d. Operational workloads will be emphasized.

e. Bias (perceived or real) in favor of historic approachs used by state office program leaders is likely to be avoided.

Disadvantages

a. Support may not be generated in all offices.

b. It is not as thorough or as likely to generate new ideas.

c. State Office resistence may be created due to concern over roles.

3. Statewide Multiple Program Group. A single working group would be established drawing program specialists from related or similar (in concept) programs at various office levels around the state. For example, a minerals work group might be created.

Advantages

a. This approach is less expensive and more direct than the two preceeding.

b. More than 1 program could be covered by a single group.

c. Some program specific expertise would be incorporated for all programs.

d. Concepts used in one program are likely to "cross-fertilize" into other programs.

e. Concern over roles is less likely to be a factor because the group is evaluating more than one program.

Disadvantages-Statewide Multiple Program Group

a. Program specific expertise may be limited to 1 to 3 members of the working group.

b. Broad based support may not be generated.

c. New ideas are not likely to be generated other than application of existing concepts to a new program.

d. This approach is less thorough than the two preceeding.

4. Statewide Manager. The working group would be composed of Area Managers, Assistant District Managers and/or Associate District Managers.

Advantages

a. Key decision people would be involved.

b. All programs or many programs could be covered by a single group.

c. This approach is the least expensive, most direct method which also involves district and resource area people.

d. Broad concepts could be applied across programs.

e. Concern over roles is unlikely to be a factor.

Disadvantages

a. Management time would be devoted to developing the analysis at the expense of something else.

b. Managers are likely to have greater familiarity with some programs than with others.

c. Program specific expertise may need to be drawn from other sources.

d. Support from nonmanagers may not be generated.

5. Program Leader. A program leader for the program being analyzed would create the workload model and prepare the analysis. The program leader is likely to draw from experience and/or district and resource area expertise. In many programs this now occurs informally or to some degree.

Advantages

a. Workload analysis is very inexpensive and direct.

b. An individual with a statewide overview prepares the analysis.

c. An individual with program expertise prepares the analysis.

d. Concern over roles is unlikely to be a factor.

Disadvantages

a. Resource area and district input is limited.

b. One individual has undue influence over the outcome. Ideas and concepts may be accepted or rejected without group discussion or consensus.

c. A natural tendency for program leaders would be to favor historical approaches and concepts validating what they have always done.

d. A natural tendency for program leaders would be to favor workloads they feel should be done rather than measure what is being done.

e. Broad based support may not be generated.

6. Management Analyst. One or more people, without a program affiliation, would be assigned to develop the workload analysis for one or more programs. The individual or group may elect to incorporate a mix of any of the 5 options listed above.

Advantages

a. Workload analysis is very inexpensive and direct.

b. An individual with a statewide overview prepares the analysis.

c. Concern over roles is unlikely to be a factor.

d. Broad concepts could be applied across programs.

e. All programs, or many programs, could be covered by a single individual or group.

f. Bias (real or perceived) concerning historical approaches in any program is unlikely.

Disadvantages-Management Analyst

a. Program specific expertise would need to be drawn from other sources.

b. One individual may influence the outcome. Ideas and concepts may be accepted or rejected without group discussion or consensus.

c. Broad based support may not be generated.

d. Lack of extensive program specific input might cause something to be overlooked and/or a reliance on historical approaches and ideas.

e. Broad based support may not be generated.

E. Roles for Key People Involved With the System

The following groups of statements are intended to serve as a general guideline or checklist for implementing the workload analysis.

1. Managers

a. Make assignments concerning who has responsibility for accomplishing the workload analysis.

b. Identify the level of detail desired for each program.

c. Provide support and feedback as needed during development of the analysis.

d. Review the analysis provided. Evaluate what is being done against Bureau priorities, District needs, future thrusts, etc. Make decisions.

2. Individuals Assigned To Develop A Workload Analysis

a. Incorporate as much feedback and information as possible from program specialists in the district and resource area offices. People who are doing the work are usually the best source of information about the work.

b. Use techniques that build support at all office levels.

c. Do not rely too heavily on historical concepts and ideas because that would tend to bias the result toward reinforcing existing approaches.

d. Use the most objective and accurate data available.

e. Measure operational work that is being done, not what should be done (applies to workload analysis but not to program evaluation).

3. District and Resource Area Program Specialists

a. Provide forceful discussion, accurate information and thoughtful feedback.

b. Resist the tendency to champion an individual resource area or district program at the expense of sound management ideas.

4. Program Leaders

a. Apply the workload analysis model to the program yearly.

b. Provide quality control review, for consistency and reasonableness, of district data submissions.

c. Prepare state office work descriptions, using the workload indicator categories whenever possible, in time for District Manager review.

d. Promote statewide program specialist participation in developing and supporting of the workload analysis model.

F. Uses For The System

1. To review workload distribution in comparison with budget and positions.

2. To help target support work being done to coincide with work being done at the resource areas and districts.

3. To create and maintain a multi-year data base for the program.

4. To demonstrate Utah's workload to BLM offices outside the state.

5. To compare Utah's workload with that in other states.

6. To compare Utah BLM's workload and dollar efficiency with similar programs in other agencies. For example, to compare Utah BLM's permitting programs in grazing and recreation with those in the Forest Service and the Park Service. This type of work may also be useful to Bureauwide working groups evaluating a program or group of programs.

In each of these uses, different kinds of analysis could be developed. Analysis might include discussion of the following items.

a. How efficient are different offices in using allocated dollars to accomplish similar types of workload?

b. Is higher priority work in one location not being adequately funded, while lower priority work is being funded? If so, why?

c. Are priority choices being made or is an attempt made to do everything regardless of funding?

d. How much of the workload in different locations can be tied to an identifiable need, demand or action taken by the public (as opposed to work planned and proposed internally)?

e Does the policy and quality control work being done provide support in the workload areas where most of the operational work is occurring? A match would be expected if:

1) Area Managers and District Managers are setting operational priorities,
2) specialists are doing work consistent with the priorities set,
3) the workload indicators represent what people are doing and
4) program leaders are responding to priorities set by line management (absent unusual circumstances or problems).

G. Recommendations

1. The range program should be the highest priority for the type of analysis done for recreation under this project. The reasons are:

a. Budgets in the range program are declining,
b. Personnel costs in the range program are the highest of any program in the state (or among the highest),
c. The program constitutes a major portion of the workload for every office in the state,
d. This type of data base should be available to managers at all levels because of the importance of the program to all offices.

2. The grazing program workload indicator categories should be developed with large amounts of resource area and district involvement in order to generate support for the resulting analysis.

3. Priorities for workload analysis similar to the one done for this project should be set by considering the following:

a. Program size as reflected in the statewide budget,
b. The number of program personnel,
c. The number of offices involved in the program,
d. The ease of developing a workload analysis (small programs),
e. Management emphasis placed on the program, and
f. The degree to which a similar data base is now used and agreed upon for the program.

4. The 10 remaining major programs (subactivities) should be analyzed in the following order:

Range Management/ Wild Horses and Burros (4321, 4322)
Oil and Gas (4111, 4112)
Realty Management (Lands--4211, 4212)
Soil/Air/Water (4341)
Wildlife/ Threatened and Endangered Species (4351, 4352)
Nonenergy Minerals (4131, 4132, 4133)
Cultural (4331)
Forestry (4311, 4312, 4313)
Coal (4121)
Wilderness (4332)

5. Other than possibly for range management, the expense of the field program specialist option is not justified. However, involving some resource area and district specialists should still be attempted.

6. The data from which summary tables and conclusions are drawn should always be available to managers for cross checking and staff review.

7. Funding for field compliance activities should always be tied, regardless of the subactivity, to the authorization generating the need for the compliance. Management of an activity requires sufficient field presence to ensure that desired outcomes will occur. This is true for grazing (see the IG Report), minerals (the I & E and royalty programs), realty (construction compliance, etc.), recreation (permitting), forestry (permitting), etc.

8. As workload analyses are completed, tables of organization should be reviewed to see if changes should be made in on board positions, or in target positions.

9. As workload analyses are completed, a comparison between program size/complexity and position grade should be completed. This might take the form of desk audits.

10. The workload indicators should be periodically checked to ensure that they continue to reflect the major operational workloads. This could be done quickly and without fanfare in most programs. Care should be taken not to tinker with the system too much or too often. Frequent change risks loss of consensus support, credibility and a consistent historical data base.

G. Summary

The significant indicator workload analysis system does meet the goal finally developed for the project. In also satisfies in large part all of the objectives laid out for the system. This paper has defined roles for all participants in developing the workload analysis and options for development. The recommendations are my own and are provided for managment consideration.

RECREATION ANALYSIS FOR UTAH

How many Districts will be analyzed (up to 5)?
5

WORKLOAD	POINTS
1. COMMERCIAL PERMITEES	
Over 75	16
71 to 75	15
66 to 70	14
61 to 65	13
56 to 60	12
51 to 55	11
46 to 50	10
41 to 45	9
36 to 40	8
31 to 35	7
26 to 30	6
21 to 25	5
16 to 20	4
11 to 15	3
6 to 10	2
1 to 5	1
None	0
2. NONCOMMERCIAL PERMITS PROCESSED	
Over 2310	15
2141 to 2310	14
1971 to 2140	13
1801 to 1970	12
1631 to 1800	11
1461 to 1630	10
1291 to 1460	9
1121 to 1290	8
951 to 1120	7
781 to 950	6
611 to 780	5
441 to 610	4
271 to 440	3
101 to 270	2
1 to 100	1
None	0

3. FACILITIES INVESTMENT

Over $4,875,000	14
$4,500,001 to $4,875,000	13
$4,125,001 to $4,500,000	12
$3,750,001 to $4,125,000	11
$3,375.001 to $3,750,000	10
$3,000,001 to $3,375,001	9
$2,625,001 to $3,000,000	8
$2,250,001 to $2,625,000	7
$1,875,001 to $2,250,000	6
$1,500,001 to $1,875,000	5
$1,125,001 to $1,500,000	4
$750,001 to $1,125,000	3
$375,001 to $750,000	2
$1000 to $375,000	1
No developed or semi-developed sites	0

4. VISITOR HOURS--length of stay

Over 1,440,000	13
1,320,001 to 1,440,000	12
1,200,001 to 1,320,000	11
1,080,001 to 1,200,000	10
960,001 to 1,080,000	9
840,001 to 960,000	8
720,001 to 840,000	7
600,001 to 720,000	6
480,001 to 600,000	5
360,001 to 480,000	4
240,001 to 360,000	3
120,001 to 240,000	2
Fewer than 120,000	1

5. DEVELOPED AND SEMI-DEVELOPED SITES

Assign 1/2 point for each semi-developed site and 1 point for each developed site in the RMA. Add the points and enter the total.

NOTE: Consensus identified Little Sahara as the largest and most complex developed site in Utah. This is at least in part measured above through facility investment.

6. Visits--Number of People

Over 120,000	11
108,001 to 120,000	10
96,001 to 108,000	9
84,001 to 96,000	8
72,001 to 84,000	7
60,001 to 72,000	6
48,001 to 60,000	5
36,001 to 48,000	4
24,000 to 36,000	3
12,000 to 24,000	2
Fewer than 12,000	1

7. FEES COLLECTED

Over $120,000	10
$106,001 to $120,000	9
$92,001 to $106,000	8
$78,001 to $92,000	7
$64,001 to $78,000	6
$50,001 to $64,000	5
$36,001 to $50,000	4
$22,001 to $36,000	3
$8,001 to $22,000	2
$1 to $8000	1
None	0

8. COMPETITIVE PERMITS PROCESSED

9 or more permits	9
8 permits	8
6 permits	6
7 permits	7
6 permits	6
5 permits	5
4 permits	4
3 permits	3
2 permits	2
1 permit	1
No competitive permits	0

The following is provided as an example only. It is not the final oil and gas model. It demonstrates the kind of workload categories which might be used.

OIL AND GAS ANALYSIS FOR SAMPLE

How many RAs will be analyzed (up to 4)? 4

WORKLOAD	POINTS
1. ACTIVE WELLS	
Over 720	14
661 to 720	13
601 to 660	12
541 to 600	11
481 to 540	10
421 to 480	9
361 to 420	8
301 to 360	7
251 to 300	6
201 to 250	5
151 to 200	4
101 to 150	3
51 to 100	2
1 to 50	1
None	0
2. ACTIVE LEASES	
Over 300	13
276 to 300	12
251 to 275	11
226 to 250	10
201 to 225	9
176 to 200	8
151 to 175	7
126 to 150	6
101 or 125	5
76 or 100	4
51 to 75	3
26 to 50	2
1 to 25	1
3. WELL INSPECTIONS	
Over 420	13
386 to 420	12
351 to 385	11
316 to 350	10
281 to 315	9
246 to 280	8
211 to 245	7
176 to 210	6
141 to 175	5
106 to 140	4
71 to 105	3
36 to 70	2
1 to 35	1
No inspections	0

4. APPLICATIONS FOR PERMIT TO DRILL (APDs)

Over 50	11
46 to 50	10
41 to 45	9
36 to 40	8
31 to 35	7
26 to 30	6
21 to 25	5
16 to 20	4
11 to 15	3
6 to 10	2
1 to 5	1

5. SUNDRY NOTICES

Over 350	10
311 to 350	9
271 to 310	8
231 to 270	7
191 to 230	6
151 to 190	5
111 to 150	4
71 to 110	3
31 to 70	2
1 to 30	1

6. LEASES REVIEWED FOR DILIGENCE

Over 300	9
261 to 300	8
221 to 260	7
181 to 220	6
141 to 180	5
101 to 140	4
61 to 100	3
21 to 60	2
1 to 20	1
None	0

7. MGS ACRES CLASSIFIED YEARLY

Over 700 acres	8
601 to 700	7
501 to 600	6
401 to 500	5
301 to 400	4
201 to 300	3
101 to 200	2
0 to 100	1

8. ENFORCEMENT ACTIONS

Over 140 INCs or written orders	8
121 to 140	7
101 to 120	6
81 to 100	5
61 to 80	4
41 to 60	3
21 to 40	2
1 to 20	1
None	0

9. PRODUCT VERIFICATIONS

4 product verifications done for the resource area	8
3 product verifications	6
2 product verifications	4
1 product verification	2
None	0

10. MILES OF SEISMIC LINE-3 year average

Over 700 miles	6
501 to 700 miles	5
301 to 500 miles	4
201 to 300 miles	3
101 to 200 miles	2
1 to 100 miles	1

OIL AND GAS ANALYSIS FOR SAMPLE

	RA# 1	RA# 2	RA# 3	RA# 4	SUM
ACTIVE WELLS	1	2	3	4	10
ACT. LEASES	1	2	3	4	10
WELL INSPECT	1	2	3	4	10
APDs	1	2	3	4	10
SUN. NOTICE	1	2	3	4	10
DILIGENCE	1	2	3	4	10
WGS CLASS.	1	2	3	4	10
INC ORDERS	1	2	3	4	10
PROD VER.	1	2	3	4	10
SEISMIC	1	2	3	4	10
SUM	10	20	30	40	100